

## ABSTRACT OF THE DISCLOSURE

First, a conductive material of aluminum-based material is deposited and patterned to form a gate wire including a gate line, a gate pad, and a gate electrode. A gate insulating layer is formed by depositing nitride silicon in the range of more than 5 300°C for 5 minutes, and a semiconductor layer an ohmic contact layer are sequentially formed. Next, a conductor layer of a metal such as Cr is deposited and patterned to form a data wire include a data line intersecting the gate line, a source electrode, a drain electrode and a data pad. Then, a passivation layer is deposited and patterned to form contact holes exposing the drain electrode, the gate pad and the data pad. Next, 10 indium zinc oxide is deposited and patterned to form a pixel electrode, a redundant gate pad and a redundant data pad respectively connected to the drain electrode, the gate pad and the data pad.